ABSTRACT

In a method of monitoring the formation of a coating on a single particle (P), an apparatus is used which comprises means (2, 5, 6, 9) for arranging said particle (P) at a given spatial location, and a fluid supply unit (3) adapted to apply a coating fluid to the particle (P) such that the coating is formed. Further, the apparatus has a measurement unit (4) which is adapted to perform a spectrometric measurement on the coating during formation thereof, and to derive a measurement value of at least one principal parameter related to the coating. Thus, such principal parameters, for example thickness, thickness growth rate and physical and/or chemical properties related to the quality of the coating, as well as heat, mass and momentum transfer, can be continuously and non-invasively monitored during the coating process on the single particle (P). The results of such measurements can be used to understand the coating process on the single particle (P), and ultimately to control, up-scale and develop industrial full-scale coating plants.